

=> file caplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 12:11:48 ON 15 JAN 2003  
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FILE COVERS 1907 - 15 Jan 2003 VOL 138 ISS 3  
FILE LAST UPDATED: 14 Jan 2003 (20030114/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s durable(1)(non-woven or nonwoven or unwoven un-woven)
    19030 DURABLE
      10 DURABLES
    19038 DURABLE
      (DURABLE OR DURABLES)
    572940 NON
      30 NONS
    572964 NON
      (NON OR NONS)
    18091 WOVEN
      88 WOSENS
    18154 WOVEN
      (WOVEN OR WOSENS)
    1951 NON-WOVEN
      (NON (W) WOVEN)
    25538 NONWOVEN
    2488 NONWOSENS
    25759 NONWOVEN
      (NONWOVEN OR NONWOSENS)
      961 UNWOVEN
    46850 UN
    1636 UNS
    48480 UN
      (UN OR UNS)
    18091 WOVEN
      88 WOSENS
    18154 WOVEN
      (WOVEN OR WOSENS)
      0 UNWOVEN UN-WOVEN
      (UNWOVEN (W) UN (W) WOVEN)
L1    239 DURABLE(L) (NON-WOVEN OR NONWOVEN OR UNWOVEN UN-WOVEN)

=> s fabric or textile
    85629 FABRIC
    76774 FABRICS
    118048 FABRIC
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                (FABRIC OR FABRICS)
        70131 TEXTILE
        75321 TEXTILES
        109910 TEXTILE
                (TEXTILE OR TEXTILES)
L2      181593 FABRIC OR TEXTILE

=> s pre-dye(l) finish
        145614 PRE
            741 PRES
        146112 PRE
                (PRE OR PRES)
        222427 DYE
        179130 DYES
        289699 DYE
                (DYE OR DYES)
            4 PRE-DYE
                (PRE(W) DYE)
        29320 FINISH
        11632 FINISHES
        36210 FINISH
                (FINISH OR FINISHES)
L3      0 PRE-DYE(L) FINISH

=> s pre dye(l) (coating or finish or treatment)
        145614 PRE
            741 PRES
        146112 PRE
                (PRE OR PRES)
        222427 DYE
        179130 DYES
        289699 DYE
                (DYE OR DYES)
            4 PRE DYE
                (PRE(W) DYE)
        602593 COATING
        304760 COATINGS
        656618 COATING
                (COATING OR COATINGS)
        29320 FINISH
        11632 FINISHES
        36210 FINISH
                (FINISH OR FINISHES)
        1734070 TREATMENT
        161528 TREATMENTS
        1823014 TREATMENT
                (TREATMENT OR TREATMENTS)
L4      0 PRE DYE(L) (COATING OR FINISH OR TREATMENT)

=> s web (l) polyester (l) (fibers or fibres)
        20957 WEB
        5799 WEBS
        23508 WEB
                (WEB OR WEBS)
        219121 POLYESTER
        169368 POLYESTERS
        269890 POLYESTER
                (POLYESTER OR POLYESTERS)
        454241 FIBERS
        1551 FIBRES
L5      1556 WEB (L) POLYESTER (L) (FIBERS OR FIBRES)

=> d his

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L1 239 S DURABLE(L) (NON-WOVEN OR NONWOVEN OR UNWOVEN UN-WOVEN)  
L2 181593 S FABRIC OR TEXTILE  
L3 0 S PRE-DYE(L) FINISH  
L4 0 S PRE DYE(L) (COATING OR FINISH OR TREATMENT)  
L5 1556 S WEB (L) POLYESTER (L) (FIBERS OR FIBRES)

=> s 11 and 12 and 15

L6 4 L1 AND L2 AND L5

=> d 16 1-4 bib,abs

L6 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS

AN 2000:351727 CAPLUS

DN 132:335796

TI Pulp-modified continuous bicomponent thermoplastic polymer filament  
nonwoven web composites for absorbents with increased tensile strength and  
good softness and absorbency

IN McDowall, Debra Jean; Marmon, Samuel Edward; Creagan, Christopher  
Cosgrove; Ning, Xin; Myers, David Lewis; Duellman, Justin Max; Haynes,  
Brian David; McManus, Jeffrey Lawrence; Smith, Charles Allen; Smith, Kevin  
Edward; Clark, Darryl Franklin

PA Kimberly-Clark Worldwide, Inc., USA

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000029658	A1	20000525	WO 1999-US26526	19991110
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	BR 9915271	A	20010807	BR 1999-15271	19991110
	EP 1141460	A1	20011010	EP 1999-972273	19991110
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	JP 2002530540	T2	20020917	JP 2000-582633	19991110
PRAI	US 1998-191733	A	19981113		
	WO 1999-US26526	W	19991110		

AB The **nonwoven** composites comprise 3-95% continuous bicomponent filaments consisting of a component comprising **durable** thermoplastic polymers (A) and a thermoplastic polymer (B) component comprising soft polymers or wettable polymers other than A and having a cross section having A and B components arranged in distinct zones, and 5-97% pulp fibers contained within the continuous filaments. The **nonwoven** composites are useful for diapers, training pants, underpants, adult incontinence pads, feminine hygiene articles, swim wear, and baby wipes (no data). A compn. contg. 48.0% (on fiber) Exxon 3445 (polypropylene) and 1% surfactant and a compn. contg. 49.0% Dow 61800 (LLDPE) and 1% Union Carbide DS 4DOS (copolymer) were together melt spun, exposed to elec. charge, mixed with pulp fibers using an air assist, deposited onto a conveyer, and heat-treated at 264.degree.F to give a **nonwoven** composite comprising 79% spun bicomponent fibers and 21% pulp fibers and exhibiting satd. capacity 11.7 g/g on immersing the

composite in a saline soln. for 20 min and desorbing the composite in vacuo and showing tensile strength 3059 g (dry) and 2793 g (wet) and elongation 23% (dry) and 25% (wet).

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS  
AN 1989:40466 CAPLUS  
DN 110:40466  
TI Treatment of polyester fibers for durable hydrophilicity  
IN Yokozawa, Michiaki; Ishikawa, Tomonori; Kanatsuki, Osamu  
PA Japan Ester Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63227874	A2	19880922	JP 1987-57436	19870312
PRAI	JP 1987-57436		19870312		

AB **Polyester fibers** are treated with 0.1-1.0% block polyether-esters (av. d.p. 3-10) prepd. from terephthalic acid (I), ethylene glycol (II), and 0.2-1.0 equiv (based on II) polyethylene glycol (mol. wt. 700-3000), heated at 130.degree., formed into a **web**, yarn, **nonwoven fabric**, **fabric**, etc., and heated at 140-200.degree. to give a product with **durable** hydrophilicity. Thus, a poly(ethylene terephthalate) tow was stretched, crimped, treated with 1.0% I-II-PEG (mol. wt. 1300) block copolymer (III, II/PEG = 1.0/0.3 mol) for 5 min, dried, heated at 130.degree., and cut to give 3-denier monofilaments, which were formed into a sliver, heated at 170.degree. for 10 min, washed by H<sub>2</sub>O, and dried at 120.degree. to give a sample. Water sinking time of 1 g sample was 1.3 s, vs., 7.0 s for the sample prepd. similarly using 0.05% III instead.

L6 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS  
AN 1988:494728 CAPLUS  
DN 109:94728  
TI Nonwoven **fabric** with good dry and wet strength  
IN Stepanek, Oldrich; Pivec, Vladimir; Zoucha, Jindrich  
PA Czech.  
SO Czech., 3 pp.  
CODEN: CZXXA9  
DT Patent  
LA Czech

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CS 246270	B1	19861016	CS 1984-1045	19840215
PRAI	CS 1984-1045		19840215		

AB **Nonwovens** with high dry and wet strength and **durable** liq. uptake and gas permeability are manufd. from .gtoreq.1 **webs** contg. 3-25% chem. binder combined with reinforcing, nettings, or **fabric** from polypropylene, polyamide, **polyester**, or polyethylene (I) by calendering at 80-280.degree. and 4-10 kPa. Thus, 1 net 20 g-m-2 was placed between **webs** from viscose **fibers** contg. 6% binder (25 g-m-2) and calendered at 140.degree., 6 kPa, and 3 m-min-1 giving **nonwoven** with dry strength increased by 73% in the longitudinal and 311% in the cross direction in comparison with the **nonwoven** without net insert.

L6 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS  
AN 1979:406376 CAPLUS  
DN 91:6376

TI Bonded nonwoven **fabrics** using ionizing radiation  
 IN Drellich, Arthur H.; Oney, David G.  
 PA Johnson and Johnson, USA  
 SO U.S., 6 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4146417	A	19790327	US 1977-833859	19770916
PRAI	US 1976-683102		19760504		

AB Bonded **nonwoven fabric** is manufd. by forming a layer of **fibers** contg. 0-5 wt.% thermoplastic **fibers**, heating and compressing the layer to provide intimate contact between the **fibers**, applying a polymerizable binder to the compressed layer, and treating the layer with ionizing radiation in the absence of any mech. compression of the fiber layer. For example, a **web** of **polyester fibers** (1.5 denier, 2 in. length) weighing 600 gr/yd<sup>2</sup> was impregnated to 200% pickup with a 10% soln. of bisphenol A diglycidyl ether diacrylate [4687-94-9] in acetone, using a std. mangle operation. After evapn. of acetone the **web** was calendered at 50 psi and exposed to an electron beam (8Mrad), giving a strong, washable and **durable nonwoven fabric**.

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 L4 0 S PRE DYE(L) (COATING OR FINISH OR TREATMENT)  
 L5 1556 S WEB (L) POLYESTER (L) (FIBERS OR FIBRES)  
 L6 4 S L1 AND L2 AND L5

=> s treatment or finish  
 1734070 TREATMENT  
 161528 TREATMENTS  
 1823014 TREATMENT  
 (TREATMENT OR TREATMENTS)  
 29320 FINISH  
 11632 FINISHES  
 36210 FINISH  
 (FINISH OR FINISHES)  
 L7 1853870 TREATMENT OR FINISH

=> s l1 and l2 and l5 and l7  
 L8 1 L1 AND L2 AND L5 AND L7

=> d l8 bib,abs

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS  
 AN 1989:40466 CAPLUS  
 DN 110:40466  
 TI **Treatment** of polyester fibers for durable hydrophilicity  
 IN Yokozawa, Michiaki; Ishikawa, Tomonori; Kanatsuki, Osamu  
 PA Japan Ester Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63227874	A2	19880922	JP 1987-57436	19870312
PRAI	JP 1987-57436		19870312		

AB **Polyester fibers** are treated with 0.1-1.0% block polyether-esters (av. d.p. 3-10) prepd. from terephthalic acid (I), ethylene glycol (II), and 0.2-1.0 equiv (based on II) polyethylene glycol (mol. wt. 700-3000), heated at 130.degree., formed into a **web, yarn, nonwoven fabric, fabric,** etc., and heated at 140-200.degree. to give a product with **durable** hydrophilicity. Thus, a poly(ethylene terephthalate) tow was stretched, crimped, treated with 1.0% I-II-PEG (mol. wt. 1300) block copolymer (III, II/PEG = 1.0/0.3 mol) for 5 min, dried, heated at 130.degree., and cut to give 3-denier monofilaments, which were formed into a sliver, heated at 170.degree. for 10 min, washed by H2O, and dried at 120.degree. to give a sample. Water sinking time of 1 g sample was 1.3 s, vs., 7.0 s for the sample prepd. similarly using 0.05% III instead.

=> log y	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
	59.19	59.40
FULL ESTIMATED COST		
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
	-3.26	-3.26
CA SUBSCRIBER PRICE		

STN INTERNATIONAL LOGOFF AT 12:22:18 ON 15 JAN 2003